

Abstract of the Disclosure

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The supported catalyst according to the present invention comprises (A) a support of organic or inorganic powder with a high-surface area, (B) a polymer coated onto the support and (C) a homogeneous transition metal compound as essential component, the polymer functioning an insulation layer between the support and the metal compound. The supported catalyst can contain optionally (D) alkyl aluminoxane and/or (E) alkyl aluminum compound. By using the supported catalyst provided by the present invention, the productivity of styrenic polymer is much increased and the reactor fouling was significantly reduced. The supported catalyst can be used in combination with a cocatalyst, preferably an alkyl aluminoxane. The styrenic polymer powder such produced by the present invention has good flow-ability and good morphology demonstrating a great deal of industrial applicability.

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